



BETTERBRICKS

BUILDING COMMISSIONING

for better public buildings

CASE STUDY



Nampa City Hall, Nampa, ID

"The retro-commissioning process was a positive experience for the City. For the people who maintain the building it was wonderful from an educational standpoint, and provided them a greater understanding of the relationship between the building and its systems."

- Dennis Davis, City of Nampa

COMMISSIONING QUICK FACTS

Building: Nampa City Hall

Location: Nampa, Idaho

Completion date: March, 2003

Scope of project: Retro-Commissioning

Commissioning cost: \$19,317¹

First-year cost benefit: \$9,920²

Annual energy savings: \$16,790³

¹ Commissioning providers fee only.

² Cost reduction or avoidance.

³ Annual energy savings based on cost of electricity of \$0.0494/kWh and natural gas of \$0.755 /therm.

CITY OF NAMPA GETS SOME FIRST-HAND EXPERIENCE

Changes are frequently made to buildings that have far more impact than is expected. The City of Nampa, Idaho learned this lesson first hand. The 23,210 square-foot City Hall was built in 1982 and, over the years, the building use strayed from the original design. As a result, there were serious airflow and temperature problems. Some staff members had to keep portable heaters at their desks; others had to use fans to improve air circulation. Much of the major building maintenance was contracted out, and the staff had neither the time nor expertise to bring the building back into reasonable operational parameters.

As a leader in energy conservation, the City of Nampa decided that commissioning the building (also known as retro-commissioning) would serve as the best approach to investigate and resolve the problems. The City has participated in the Rebuild Idaho program and was the first city in the state to adopt the Northwest Energy Code and, more recently, the International Energy Conservation Code. City officials were motivated to resolve the energy problems that were literally right under their noses.

The first step of the commissioning process was to plan. The City established a project team that included building staff, an in-house project manager, and a commissioning provider. They collected and evaluated building documentation. They

BUILDING COMMISSIONING

Is a systematic and documented process of ensuring that the owner's operational needs are met, building systems perform efficiently, and building operators are properly trained.

over



COMMISSIONING BENEFITS

- Increased occupant comfort
- Reduced operational deficiencies
- Reduced operation costs through energy savings
- Developed a plan for future projects

reviewed 30 months of utility billing data, building control sequences, and blueprints.

The second step was to assess. The commissioning provider obtained the documentation and conducted site visits. They conducted a comfort survey, interviewed staff, analyzed ductwork, and observed equipment operation.

The third step in this commissioning project was implementation. City officials prioritized and calculated payback time and the estimated costs of each finding. They then selected which measures to implement. The City of Nampa implemented 90 percent of the recommendations with City staff completing most of the work. They incorporated the few more complicated capital improvements into a larger remodel project.

The results of the project provided City Hall staff with a much improved and more comfortable work environment. Occupants no longer keep heaters or fans in their offices and there are far fewer temperature complaints. The facility staff has an updated O&M manual, too.

LESSONS LEARNED

- Begin commissioning as early as possible in a remodel project.
- Avoid duplicate efforts by including all parties in planning.
- Set clear objectives in writing.

"Both sides were willing to help, learn and contribute. It was a good atmosphere all around."

- David Beck, Commissioning Provider

PROJECT PARTNERS

- **OWNER**
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- **COMMISSIONING PROVIDER**
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